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Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/825,164

Applicant(s)

DUIMOVICH ET AL.

Examiner

Jungwon Chang

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 05 July 2006.  
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-14, 16, 18-24 and 26-52 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1-14, 16, 18-24 and 26-52 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.  
5) ☐ Notice of Informal Patent Application  
6) ☐ Other: \_\_\_\_\_.

### FINAL ACTION

1. This Office Action is in response to amendment filed on 7/5/06.
2. Claims 15, 17 and 25 have been cancelled. Claims 1-14, 16, 18-24 and 26-52 are presented for examination.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. **Claims 1, 2, 5-8, 10 and 12** are rejected under 35 U.S.C. 103(a) as being unpatentable over Haitsuka et al. (US 6,505,201), hereinafter Haitsuka, in view of Chiu et al. (US 6,701,363), hereinafter Chiu.

5. As for claim 1, Haitsuka discloses the invention as claimed, including a method of managing a data access system configured to transfer data over a communication network (120, fig. 1) between a server system (130, 150, fig. 1) and a plurality of user sites (102, fig. 1; clients; col. 1, lines 64-65) in response to requests from network browsers at the user sites (col. 1, lines 39-67; col. 2, lines 20-52), said method comprising the steps of:

monitoring a network browser of a first user site of the plurality of user sites to obtain performance data of the data access system, the performance data being indicative of a data transfer operation in the data access system performed in response to a network browser request initiated by a user of the first user site, the monitoring being controlled by a monitoring agent (client monitoring application, 110, fig. 3) resident at the first user site (100, fig. 3) (col. 5, lines 53-67; col. 6, lines 12-27; col. 6, line 56 – col. 7, line 4; col. 8, lines 16-30);

transmitting data indicative of the monitored performance data from the monitoring agent (monitoring data, fig. 3; 540, fig. 5; col. 5, lines 53-67; col. 6, line 56 – col. 7, line 4; col. 8, lines 16-30);

receiving the data indicative of the monitored performance data transmitted from said monitoring agents (col. 5, lines 53-67; col. 6, line 56 – col. 7, line 4; col. 8, lines 16-30);

collecting a quantity of the data received (col. 6, lines 1-27; col. 6, lines 44-64);

summarizing the quantity of the data collected to produce summarized performance data (data is summarized and classified; col. 6, lines 1-27; col. 6, lines 44-64); and

storing said summarized performance into a database (140, fig. 3; col. 5, lines 47-52).

6. Haitsuka discloses network usage information (col. 6, lines 28-37). However, Haitsuka does not specifically use terms “performance metrics”. Chiu explicitly disclose performance metrics (col. 1, lines 19-25, “measuring and analyzing performance

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characteristics”; col. 2, lines 49-67, “amount of data transmitted or rates such as the amount of data per unit time”). It would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine the teachings of Haitsuka and Chiu because Chiu’s performance metrics would extremely useful in that they can allow easy validation of web page design based on historical data, and they can provide objective means to compare and contrast web application performance (Chiu, col. 2, lines 57-61).

7. As for claim 2, Haitsuka discloses the method of claim 1 wherein the quantity of data selected represents performance of the data access system for a specific time interval (information on a periodic basis; col. 6, lines 1-12).

8. As for claim 5, Haitsuka discloses the method of claim 1 further comprising, before the receiving step, the steps of

receiving data indicative of the performance of a plurality of data access systems from said performance monitoring agents (col. 3, lines 3-30); and

filtering said data received to pertain to a selected data access system (col. 7, line 55 – col. 8, line 11; col. 8, lines 16-30).

9. As for claim 6, Haitsuka discloses the method of claim 1 wherein the performance data is correlated to factors of interest (col. 7, line 55 – col. 8, line 11; col. 8, lines 16-30).

10. As for claim 7, Haitsuka discloses the method of claim 1 wherein the server system comprises at least one Hyper Text Transfer Protocol (HTTP) server (web server; fig. 1).

11. As for claim 8, Haitsuka discloses the method of claim 7 wherein the performance data comprises a summary of performance metrics for a HTTP page (data is summarized and classified; col. 6, lines 1-27; col. 6, lines 44-64; col. 3, lines 3-11).

12. As for claim 10, Haitsuka discloses the method of claim 1 further including the step of calculating further summarized data using said stored summarized data (data is summarized and classified; col. 6, lines 1-27; col. 6, lines 44-64; col. 3, lines 3-11).

13. As for claim 12, Haitsuka discloses a performance management system that monitors data transferred between at least one remote site and at least one user site (col. 1, lines 39-67; col. 2, lines 20-52), comprising:

a network browser (160, fig. 3) disposed on a first user site (100, fig. 3) of the at least one user site and configured to browse the at least one remote site (col. 2, lines 20-32; col. 4, lines 53-65), in response to a request by a user of the first site, for transferring data between the at least one remote site and the first user site (col. 1, lines 39-67; col. 2, lines 20-52; col. 4, lines 53-65);

a client that resides on the at least one user site (client computer, fig. 3; col. 4, lines 16-38) and collects performance data associated with the data received from

the at least one remote site (130, 150, fig. 1) (monitoring application 110 obtains identifying information; col. 8, lines 16-30; col. 9, lines 14-52; browser application stores the resource locator string; col. 10, claim 1); and

an agent in communication with the client and residing on the at least one user site (client monitoring application, fig. 3), the agent being adapted to create preliminary summary data of the performance data (data is summarized and classified; col. 6, lines 1-27; col. 6, lines 44-64).

14. **Claims 3, 4, 9 and 11** are rejected under 35 U.S.C. 103(a) as being unpatentable over Haitsuka, Chiu, in view of Liu et al. (US 6,839,680), hereinafter Liu.

15. As for claim 3, Haitsuka does not specifically disclose that the time interval is 15 minutes. However, Liu discloses the time scale may be varied by the user in order to view the system performance over specific time intervals (col. 12, line 45 – col. 13, line 15; various length fields defines the time interval; col. 28, lines 30-39). It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of Haitsuka, Chiu and Liu because Liu's various time interval would allow setting the time interval to 15 minutes in order to observe system performance on a relatively fast time scale.

16. As for claim 4, Haitsuka does not specifically disclose wherein the performance data includes a timestamp means identifying a time when the performance data was

observed and wherein the step of collecting comprises collecting the performance data that was observed during the same time interval. However, Liu discloses wherein the performance data includes a timestamp means identifying a time when the performance data was observed and wherein the step of selecting comprises collecting data that was observed during the same time interval (904, 906, fig. 9; col. 8, lines 62-65; col. 12, line 18 – col. 13, line 15). It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of Haitsuka, Chiu and Liu because Liu's timestamp would track the user's activity by analyzing the duration time the user spends on browsing a particular URL (Liu, col. 12, lines 54-65).

17. As for claim 9, Haitsuka does not specifically disclose ascertaining quality of service conditions of said data access system. However, Liu discloses ascertaining quality of service conditions of said data access system (col. 19, lines 12-21; col. 23, lines 54-62; col. 57, lines 14-27). It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of Haitsuka, Chiu and Liu because Liu's ascertaining quality of service conditions of the system would provide more accurate and comprehensive assessment of the interests of the web visitor (Liu, col. 23, lines 54-62).

18. As for claim 11, it is rejected for the same reasons set forth in claim 1 above. In addition, Haitsuka discloses a performance management system for managing a data access system configured to transfer data over a communication network (120, fig. 1)



between a server system (130, 150, fig. 1) and a plurality of user sites (102, fig. 1; clients; col. 1, lines 64-65) in response to requests from network browsers at the user sites (col. 1, lines 39-67; col. 2, lines 20-52), the performance management system comprising:

means for monitoring a network browser of a first user site of the plurality of user sites to obtain performance data of the data access system, the performance data being indicative of a data transfer operation in the data access system performed in response to a network browser request initiated by a user of the first user site, the monitoring means including a monitoring agent (client monitoring application, 110, fig. 3) resident at the first user site (100, fig. 3) (col. 5, lines 53-67; col. 6, lines 12-27; col. 6, line 56 – col. 7, line 4; col. 8, lines 16-30);

means for receiving the data indicative of the performance data transmitted from said performance monitor agents (col. 5, lines 53-67; col. 6, line 56 – col. 7, line 4; col. 8, lines 16-30);

means for collecting a quantity of the data received (col. 6, lines 1-27; col. 6, lines 44-64);

means for summarizing the quantity of the data received collected to produce summarized performance data (data is summarized and classified; col. 6, lines 1-27; col. 6, lines 44-64); and

means for storing said summarized performance data into a database (140, fig. 3; col. 5, lines 47-52).

19. Haitsuka does not specifically disclose ascertaining quality of service conditions of said data access system. However, Liu discloses ascertaining quality of service conditions of said data access system (col. 19, lines 12-21; col. 23, lines 54-62; col. 57, lines 14-27). It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of Haitsuka, Chiu and Liu because Liu's ascertaining quality of service conditions of the system would provide more accurate and comprehensive assessment of the interests of the web visitor (Liu, col. 23, lines 54-62).

20. **Claims 13, 14, 16, 18-24, 26-52** are rejected under 35 U.S.C. 103(a) as being unpatentable over Reps et al (US 6,070,190), hereinafter Reps, in view of Killian (US 6,438,592 B1), hereinafter Killian.

21. As for claim 13, Reps discloses a performance management system that monitors data transferred between at least one remote site and at least one user site (col. 1, lines 24-50), comprising:

a network browser (web browser, fig. 6) disposed on a first user site of the at least one user site and configured to browse the at least one remote site, in response to a request by a user of the first site, for transferring data between the at least one remote site and the first user site (col. 5, lines 24-42; col. 17, lines 45-63);

a client application residing on the first user site of the at least one user site (AMA application program; 203, fig. 2), the client application comprising:

a data gathering module that is adapted to capture at least the performance data of data transfer operations that effect data transfer between the first user site and the at least one remote site initiated by network browser requests initiated by a user of the first user site, the performance data including at least communication data indicative of network performance statistics for data transfers and application performance statistics of the network browser, the performance data being associated with individual web page object retrievals (col. 5, lines 17-23; col. 6, lines 19-54; col. 9, lines 59 – col. 10, line 28); and

an agent that is adapted to create preliminary summary data from at least the performance data for transmission to at least one server from the client application, wherein the preliminary summary data includes summaries of at least the individual *object* retrievals from the at least one remote site, wherein the at least one remote site and at least one user site do not need to acknowledge each other (servers 104, fig. 1; col. 5, lines 38-42; col. 6, lines 1-5; col. 6, lines 19-31).

22. Reps teaches capturing performance data associated with the transfer of HTML based applications over the internet (col. 8, lines 56-64). However, Reps does not explicitly teach capturing performance data associated with web page object retrievals. Killian teaches capturing performance data associated with web page object retrievals (col. 3, lines 23-63). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Reps by capturing performance data associated with web page object retrievals in order to improve the performance provided by web servers to

client computers, as taught by Killian (col. 3, lines 20-22).

23. As for claim 14, Reps teaches the performance management system according to claim 13, wherein the client application is adapted to simultaneously integrate with at least a network level interface and an application level interface for measurement and collection of the communication data and the application data (col. 5, lines 17-62).

24. As for claim 16, Reps teaches the performance management system of claim 13, wherein the client application is adapted to combine the captured communication data and application data gathered from the network level interface and the application level interface into a single page performance record to link the communication data and application data (col. 5, lines 17-62).

25. As for claim 18, Reps teaches the performance management system according to claim 13, wherein the received performance data is used to determine overall usage of a data access system (Figs. 8-10).

26. As for claim 19, Reps teaches the performance management system according to claim 13, wherein the received performance data is used to ascertain a quality of service based on an aggregated end user response to a data access system (Figs. 8-10).

27. As for claim 20, Reps teaches the performance management system according to claim 13, wherein the received performance data is used to analyze aggregated end user response based on actions taken within a data access system and wherein the aggregated end user response is used to infer user behavior (col. 6, line 66 – col. 7, line 13).

28. As for claim 21, Reps teaches the performance management system according to claim 20, wherein the received performance data is used to generate graphical illustrations of aggregated end user response in combination with actual performance within a data access system (col. 5, lines 39-45).

29. As for claim 22, Reps teaches the performance management system according to claim 13, wherein the client application is adapted to queue a predetermined number of immediately preceding page performance measurements for transmission or internal assessment (col. 5, lines 39-45).

30. As for claim 23, Reps teaches the performance management system according to claim 22, wherein the client application is adapted to transmit the queued page performance measurements when instructed by the at least one monitoring server or in response to the internal assessment (col. 5, lines 39-45).

31. As for claim 24, Reps teaches the performance management system according

to claim 13, wherein the client application is adapted to respond to and transmit a configurable number of subsequent page performance measurements based on a set of received rules including a number of pages to transmit or a duration of time to transmit subsequent pages (col. 5, lines 43-62).

32. As for claims 29-37, 40 and 42-45, Reps teaches the use of configuration information to adjust the specific monitoring parameters (col. 11, line 42 – col. 12, line 27). However, Reps does not appear to explicitly teach a client application receiving instructions from a server. However, Killian explicitly teaches a client application receiving instructions from a monitoring server in order to adjust the monitoring parameters for specific web objects (col. 3, lines 23-63). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Reps by receiving instructions from a server at a client application in order to optimize the monitoring parameters for specific web objects, as taught by Killian (col. 3, lines 47-63).

33. As for claims 26-28, Reps teaches requesting and caching objects for configurable period of time, however, Reps does not specifically teach that the objects may comprise graphical and non-graphical web page objects including images, plug-ins, page frames, applets and cascading style sheets associated with web pages and web frames. Killian teaches performance monitoring for objects comprising graphical and non-graphical web page objects including images, plug-ins, page frames, applets and cascading style sheets associated with web pages and web frames (col. 3, lines 23-63).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Reps by using objects comprising graphical and non-graphical web page objects including images, plug-ins, page frames, applets and cascading style sheets associated with web pages and web frames in order to monitor performance parameters for specific web objects, as taught by Killian (col. 3, lines 47-63).

34. As for claims 38, 39 and 41, Reps teaches a graphical user interface communicating metrics associated with object retrievals (Figs. 8-10), however, Reps does not specifically disclose that the objects may comprise web page objects. Killian teaches obtaining metrics for web page object retrievals in order to monitor performance parameters for specific web objects (col. 3, lines 23-63). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Reps by communicating metrics associated with web page object retrievals in order to monitor performance parameters for specific web objects, as taught by Killian (col. 3, lines 47-63).

35. As for claim 46, Reps teaches the performance management system according to claim 13, wherein the at least one monitoring server is adapted to collect, aggregate, and display performance data associated with predefined individual objects measured by the agent (col. 6, lines 15-54).

36. As for claim 47, Reps teaches the performance management system according

to claim 13, wherein the at least one monitoring server is adapted to store, display and determine trends based on performance data that is associated with individual objects measured by the agent (col. 6, line 15 – col. 7, line 13; Figs. 8-10).

37. As for claim 48, Reps teaches the performance management system according to claim 13, wherein the at least one monitoring server is adapted to collect and aggregate performance data for comparison to predefined performance based threshold settings (col. 5, lines 63-67).

38. As for claim 49, Reps teaches the performance management system according to claim 13, wherein the at least one monitoring server is adapted to create, store, and evaluate performance thresholds settings based on at least one of metric values, metric value percentage differences, direct metric comparison with other metrics, historical metric values, and metric value rate of change calculations (col. 5, line 63 – col. 6, line 62).

39. As for claim 50, Reps teaches the performance management system according to claim 13, wherein the at least one monitoring server is adapted to monitor performance threshold settings and, if predetermined values are exceeded, provide automated user indications including at least one of email alerts, pager alerts, user interface notifications, and network level diagnostic operations (col. 5, lines 63-67).



40. As for claim 51, Reps does not explicitly disclose stopping the data transfer operation at the request of a user. However, the Examiner finds that this is inherent to the network browser disclosed by Reps (col. 17, lines 45-63). That is, any standard network browser includes a function for stopping data transfer operations (e.g., the stop button in Internet Explorer), as would be apparent to one of ordinary skill in the art.

41. As for claim 50, Reps teaches wherein the application data are indicative of at least one of browser imposed latency (col. 16, lines 19-32), user experience (col. 10, lines 1-15), user reaction (col. 3, lines 24-39), and user tolerance (col. 4, lines 33-46) to data transfer characteristics as measurable from the network browser.

### ***Conclusion***

42. Applicant's arguments with respect to Claims 1-14, 16, 18-24 and 26-52 have been considered but are moot in view of the new ground(s) of rejection.

43. Applicant asserts on page 18 of the remarks that Reps is clearly devoted to monitoring server application performance and completely fails to disclose or suggest the gathering of performance statistics of a network browser.

Examiner respectfully disagrees. Reps explicitly discloses application performance statistics of the network browser (col. 14, lines 10-61, "timer mechanism 307 may simply be a mechanism which places a time signature on the initial service

request 210 from the probe 201"). Furthermore, Liu discloses application performance statistics of the network browser (col. 2, lines 14-25 and 45-66; col. 12, lines 1-65).

44. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

45. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jungwon Chang whose telephone number is 571-272-3960. The examiner can normally be reached on 9:30-6:00 (Monday-Friday).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John A Follansbee can be reached on 571-272-3964. The fax phone number for the organization where this application or proceeding is assigned is 571-

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273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'Jungwon Chang'.

Jungwon Chang  
Primary Examiner  
September 18, 2006